



NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 4 - No. 7

April 5, 1973

QUESTION BOX

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it to your plant news representative; see page 7). You may or may not sign your name. It will not be used in the paper if you so desire.

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: There is one question that I know many are asking at X-10. Why are men that are the sole support of families with dependents being terminated, and yet there are many husbands and wives still employed by the Laboratory? Couldn't some of these working wives be terminated (especially if they have at most one dependent) and the men who need jobs retained? It is especially hard for men to find jobs who are terminated after 15-20 or more years at ORNL and are in their 50's. If there has to be a reduction in employees, it seems very unfair to me that many families are still getting two pay checks while others have none.

ANSWER: A reduction in the work force during time of layoff is not simply a matter of decreasing the total employment number, as your question implies. Reductions must be made, instead, on the basis of work-related factors within the particular organizational and occupational groups affected by the layoff. A person's marital status and whether or not a husband or wife is working are not the factors considered.

Everyone recognizes and regrets the obvious hardships caused by job loss, particularly if employees have long service and are, as you say, in their 50's. The Laboratory is making every effort to find other employment for those being terminated.

QUESTION: Is it possible for an ex-employee to review his own personnel folder? It is my understanding that recent court rulings have said yes.

ANSWER: Union Carbide's policy does not permit a former employee to review his personnel record. We know of no recent court rulings with which this policy conflicts.

We do, however, regularly consider requests from ex-employees for information from their personnel folders where there is an obvious need for it. Examples include copies of birth certificates, certification of skills, etc.

QUESTION: Why is our interest held for two years on our savings plan fund instead of being paid the year it is due, and who benefits from the holding of this interest?

We have been told this is the requirement of the Internal Revenue Service. Just what is this requirement? Can this interest be counted as capital gain on income tax returns?

ANSWER: The money that the Company is required to hold back whenever the General Savings Fund or the Personal Savings Account is paid to an employee who stays on the payroll is the sum of the contributions that the Company has made to that employee's account during the previous 24 months' period. Any interest that may be in an employee's account, together with any interest earned by the Company's contribution, is given to the employee at the time of each payout.

This is a requirement of the Internal Revenue Service under Internal Revenue Ruling 54-231 which provides in part "that a qualified profit sharing plan may not permit an active employee to withdraw employer contributions before they have accumulated in the fund for at least two years."

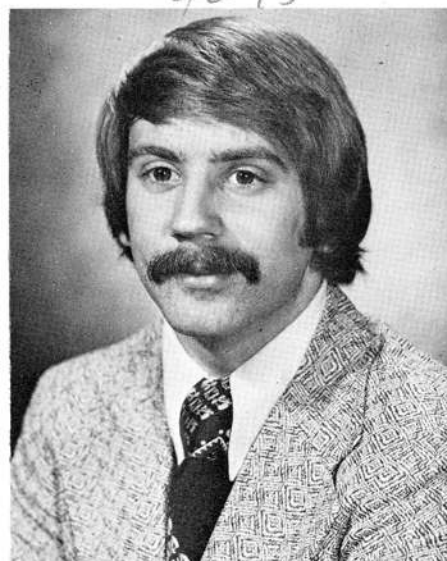
We understand that all Company contributions and all interest on these contributions must be counted as ordinary income rather than capital gains on income tax returns.

QUESTION: Is there a definite regulation concerning who is cleared or not? There are many in responsible positions who do not seem to have a Q clearance, while others in lower job classifications do have. How is a Q clearance conducted? How far does an actual investigation go? How many persons are cleared and how many rejected?

ANSWER: Yes, the Atomic Energy Act of 1954 specifically provides that those persons who will require access to classified information be processed for clearance, or more correctly stated, an "Access Authorization." An AEC

(Continued on page 8)

Tilghman high junior tapped as Paducah UCC scholar



Merle W. (Bill) Fowler, son of Dr. and Mrs. Merle W. Fowler, Jr., 201 Friedman Ave., Paducah, has been selected by the faculty of the political science department of Tilghman High School, and supported by Union Carbide Corporation, Nuclear Division, to attend a Washington Congressional Seminar as a Carbide scholar.

As the recipient of the honor, Fowler will attend the workshop June 24 through July 1. Participants are housed at Mount Vernon Jr. College where most of the seminar sessions will be held.

The schedule of events for the week includes classroom sessions, dialogues with congressional leaders and administration officials, attendance at congressional sessions and official White House ceremony as special guest of the President, and participation in discussion groups led by officials both in and out of government.

Active honor student

Fowler, a junior at Paducah Tilghman High School, is a member of the Student Council, has been a member of the debate team for two years and performs in the exclusive Tilghman Swing Choir and Madrigal Singers. An honor student with a 3.8 average, he plans to run for Student Council President in his senior year. In addition to other activities, Fowler has participated in such musicals as "South Pacific" and "Annie Get Your Gun." His hobbies include Fellowship of Christian Athletes activities, water skiing, tennis, golf and hunting.

As a Union Carbide scholar, the full cost of Fowler's participation in the Congressional Seminar program is being defrayed by Union Carbide Corporation. The young scholar's father is a surgeon in Paducah and his mother an active community leader.

\$25,000 Grant awarded UT-Biomed School

A \$25,000 Grant to further research in cancer immunology has been made to The University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, by the United Order True Sisters, Inc. (U.O.T.S., Inc.).

The presentation was made to Hilton Smith, Vice Chancellor of The University of Tennessee by Mrs. David A. Dreiling, National President of U.O.T.S., Inc. Accompanying Mrs. Dreiling was Mrs. Jacob S. Greenfield, National Project Chairman for U.O.T.S., Inc. - Cancer Service.

The School of Biomedical Sciences is part of The University of Tennessee, Knoxville, but is physically located in the Biology Division of Oak Ridge National Laboratory. The School, which was started in 1967, trains students for research in basic biological sciences such as immunology, radiation biology, virology, carcinogenesis, mammalian genetics and aging.

The grant from U.O.T.S., Inc., will be used to establish two postdoctoral fellowships to be known as the "United Order True Sisters, Incorporated, Fellowships in Cancer Immunology." Selection of promising scientists to receive these fellowships will be made by committee review.

United Order True Sisters, Inc., is composed of 43 chapters throughout the United States, and has a membership of about 13,000 women. Organized in 1946, U.O.T.S., Inc., has made cancer service its national project since 1947. It is a non-profit organization, and its services have been available to cancer patients regardless of race, creed or color.

Last course in 1972-73 NSA series is underway

Communications and Decision Making (popularly, In-Basket), the last in the 1972-73 series of business courses for secretaries and other office workers, is in progress. The Oak Ridge Chapter - National Secretaries Association regrets that it was unable to accept all applicants due to a restriction on the size of the class.

Announcement of the 1973-74 classes, which will begin in September, will be made in the Nuclear Division News.

Clark Center Recreation Park 8th season set for opening

On April 23, the Clark Center Recreation Park will open its gates officially for its eighth season.

The popular gathering place for Carbiders opened its gates for picnickers in the Spring of 1965. On June 21, 1967, the Carbide Recreation Park was officially named "The Clark Center Recreation Park," honoring the former Nuclear Division official, who retired then.

The Park has come a long way since.

The more-than-200 acres of woodland on the shores of Melton Hill Lake feature picnic area, camping sites, boat launching facilities, restrooms, a concession stand, playground for the children, a swimming area, a canoe-launching facility, nature trails, and scenic beauty that is unexcelled anywhere. (The swimming area will not open until Memorial Day week-end, when lifeguards will be on duty from 11:30 a.m. until 8 p.m. each day).

Thousands of Nuclear Division employees and their families take advantage of the park every spring and summer. There are softball diamonds (which accommodate the Division's official leagues during the summer months) horseshoe-pitching pits, outdoor basketball courts, plus many other outdoor advantages to provide "a day in the country" for everyone.

Decals required

Automobiles entering the park require decals on the bumper. These are available through the Recreation Department. Application may be made in person, or over the telephone, extension 3-5833. The Recreation Office's address is Building 9711-5, Y-12.

Camping permits are available on the site from guards at the gate. The gates open at 5 a.m. and close at 11:30 p.m. Campers are provided keys, in case an emergency should arise during the night and an exit would be required. They return the key to the guard when their camp stay is finished.

The picnic area is open to all Carbide families (Atomic Energy Commission, Oak Ridge Associated Universities and University of Tennessee Agricultural Research Laboratory employees are also

eligible to use the park facilities). Groups exceeding 10, however, should make prior reservations through the Recreation Office. There are disposal units throughout the park for garbage, and visitors are expected to maintain rules of good housekeeping, so the next picnicker may enjoy the park also.

Courtesy requested

In the launching area, drivers are asked to take their trailers to the parking area after the boat is launched. To leave it parked along the ramp area shoreline impedes the thoroughfare for the next person wishing to launch a vessel. There is a state law that boats may not exceed three miles per hour in the harbor area. This allows no wake in the bay. Skiers are also forbidden, until the outer harbor signs are passed.

So if sleeping out under the stars is your thing, or just a simple evening picnic with the family, you will enjoy the Clark Center Recreation Park.

Come on out and see a softball game this summer, or bring the kids for a swim some afternoon.

There are some rules of the road in the use of the park. These rules are available on the site, or through Recreation. They include simple housekeeping and a respect for the rights of other outdoorsmen.

PADUCAH GOLF

The Paducah Plant's annual "early-bird" tournament will inaugurate the 1973 golf season at Paxton Park, Saturday, April 28. Entry deadline for the first mixed-scrabble of the year is 12 p.m., April 25. The teams formed by the golf committee will start teeing off at 8 a.m.

To enter the play contact your division representative or call the Recreation Department, 335 PAX or 368 Bell.

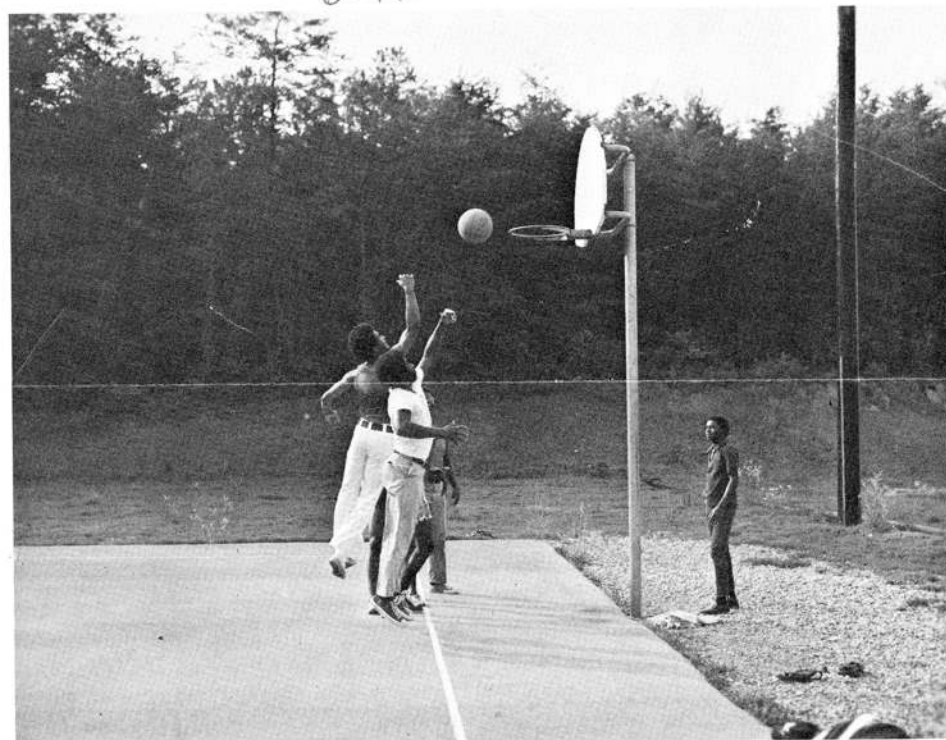
Enter yourself and your spouse as soon as possible. Something new has been added this year. Enter and see.

BOND DRIVE

There's a U.S. Savings Bond drive coming soon for Nuclear Division employees. Make purchasing bonds through payroll savings a regular habit.



BOAT LAUNCHING — Easy boat-launching is made on a paved ramp descending into Melton Hill Lake. The popular gathering place for Carbiders provides fair weather fun in many descriptions for the outdoorsman. The couple above pause on the ramp after a cruise on the many inlets of Melton Hill.



OUTDOOR BASKETBALL — A basketball court is available for a quick work-out at the Park. In addition to the paved court, there are softball diamonds available for plant league play all summer long.



PICNIC PINES — Stately pines guard the picnic area of the Clark Center Recreation Park. Tables are on a first-come, first-served basis. However, reservations may be made for large groups.



AMPLE CAMPING — Camping facilities are available to all employees at the CCRP. The recreation area provides an ideal spot for getting away from it all. You can launch your boat at the Park, then bring it around and moor it in front of your camping area.

14 students enroll in pre-coop plan from five colleges

Fourteen students who will enroll next fall in predominantly black universities have been selected for a "pre-cooperative" education program conducted by Union Carbide Corporation's Nuclear Division.

This is the fourth year Union Carbide has sponsored the program, which is designed to encourage black students to pursue college studies in science and engineering. The program, supported by the U.S. Atomic Energy Commission, is specifically aimed at students who might otherwise not attend college.

Educational institutions participating in the program are: Atlanta (Ga.) University; Howard University, Washington, D.C.; North Carolina A & T State University, Greensboro; Southern University, Baton Rouge, La.; and Tuskegee Institute, Tuskegee, Ala.

As part of the program, some of the students are placed in summer jobs as "pre-cooperative" students. Placement is contingent on their acceptance into an engineering or science curriculum at one of the participating institutions.

Students participating in the pre-cooperative program this year are:

Atlanta University -- Barry Ezekiel, Father Panik Village, Bridgeport, Conn.; Jerome Gaspard, 4920 Second Ave., Los Angeles, Calif.; Thomas D. Hightower, 3700 Hillacres Rd., S.W., Atlanta, Ga.; Robert P. Mitchell, 322 French St., Buffalo, N.Y.; Charles E. Murdaugh, 744 Park Ave., Brooklyn, N.Y.; and Murray J. Riggins, 520 Norway Ave., Cincinnati, Ohio.

Howard University -- Linda Dallas, 2516 South Deacon, Detroit, Mich.; and Jesse J. Jones, 2321 9th Ave., Bessemer, Ala.

North Carolina A & T University -- James Fonville Jr., 1402 E. Caswell St., Kinston, N.C.; and Vernon A. Williams, 829 Skeet Club Rd., High Point, N.C.

Southern University -- Donald Bon-ton, 2408 Los Angeles St., Alexandria, La.; and Walton J. Richardson, 102 Smith St., Plaquemine, La.

Tuskegee Institute -- Aaron Boatwright, 5116 Whitaker Rd., Knoxville, Tenn.; and Sarance H. Darden, 604 Penny St., Tuskegee, Ala.



John A. Martin

IEEE-NPSS elects Martin president

John A. Martin, Physics Division of Oak Ridge National Laboratory, has been elected President of the Institute of Electrical and Electronics Engineers, Nuclear and Plasma Sciences Society (IEEE-NPSS).

Martin, associate director of the Cyclotron Laboratory, has worked at ORNL since 1948. He received the B.S. degree in electrical engineering from The University of Tennessee. Before joining the staff at ORNL, Martin served as assistant instructor in physics and electrical engineering at Eastern Oregon College and The University of Tennessee, respectively.

The IEEE-NPSS is one of about 31 specialized groups within the Institute of Electrical and Electronics Engineers. It has a membership of approximately 2,300. The IEEE-NPSS is managed by the Administrative Committee, (Ad Com), elected from members-at-large. Officers of the Society are elected from the Ad Com.

Two transactions, the Transactions on Nuclear Science and the Transactions on Plasma Science, and the IEEE-NPSS Newsletter are published by the Society. It also sponsors several national and international meetings each year.

Martin is also a member of the American Physical Society, member of the editorial advisory board of, and reviewer for Particle Accelerators, and is consultant to the National Science Foundation, Physics Section. In addition, he is the author of many publications.

Y-12's DeMonbrun official in Cooling Tower Institute

J.R. (Bob) DeMonbrun, superintendent in Y-12's Fire Prevention Department, has been elected a vice president in the Cooling Tower Institute. DeMonbrun was appointed to a seat on the board of directors in June, 1972, and recently was named a vice president in charge of directing standing committees.

He has been active in CTI for several years, chairing the operating seminar during the 1968 meeting in New Orleans. As co-chairman of the program committee for this year's annual meeting in Houston, he was responsible for securing a number of speakers with a variety of scientific and informative subjects. He also originated an outline of all phases of cooling towers for a textbook which CTI is planning to publish.

As chairman of the program committee, he will preside at the June meeting in Atlanta.

The Cooling Tower Institute is an association of more than 80 major companies and their affiliates, principally United States corporations, but with representatives from Canada and Great Britain and from countries in Europe, Africa, Asia, and Australia. The CTI is essentially a technical organization operating to further the common interest of cooling tower manufacturers, owners and users of



J. Robert DeMonbrun

cooling towers, and the suppliers of equipment and services to the manufacturers and users of cooling towers. Union Carbide has been a member since 1968.

DeMonbrun joined Union Carbide in 1952. He worked at the Paducah Plant, and transferred to Y-12 in 1961. He served in the U.S. Army in Korea from 1946 until 1948. He previously worked with another division of Union Carbide in Louisville, Ky.

DeMonbrun and his wife Mary live at 4505 Silverhill Drive, Knoxville.

Area AIChE will hold annual student meeting

The Knoxville-Oak Ridge Section of the American Institute of Chemical Engineers (AIChE) will hold its annual "student night" meeting at 8 p.m., Wednesday, April 11, at the Sheraton Inn - Executive Park, Cedar Bluff Road and I-40, Knoxville.



Weaver

Guest speaker will be Theodore Weaver, national president of the AIChE and director of Licensing for the Fluor Corporation, Los Angeles, Calif. He will discuss the technical, practical and economic fac-

tors involved as industrialized nations seek to relieve a critical shortage of clean fuels by importing liquified natural gas and other clean fuels. Alternative schemes for meeting this crisis, such as coal gasification, fuel oil desulfurization and scrubbing of stack gases also will be discussed.

Students in chemical engineering from The University of Tennessee and Oak Ridge National Laboratory will be guests at a dinner of the local AIChE section prior to Weaver's address.

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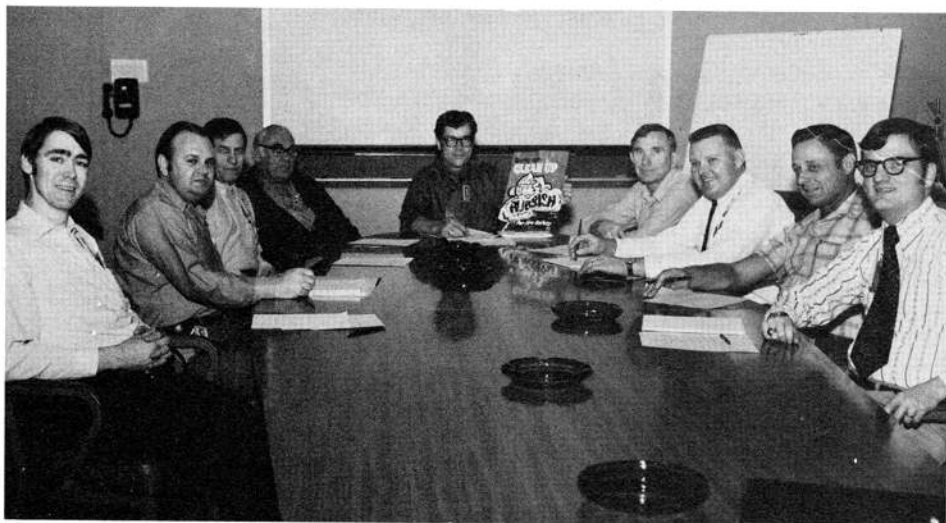
Office

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April 9

Oak Ridge Playhouse tryouts for the comedy "Butterflies are Free." Playhouse, 7:30 p.m. Open to everyone.



PADUCAH SPRING CLEAN-UP — Paducah gears for Spring Clean-Up with a new committee chaired by Robert C. Reipe. Sub-committees were also formed and an over-all plan for the year's program was begun. From left are Richard R. Veazey, Robert L. Jones, John Hester, Rex D. Kluesner, Chairman Reipe, William D. Gresham, A. Keith Yancey, Rudy L. Hines and Jerry M. Hixson.

NUCLEAR DIVISION SAFETY SCOREBOARD

Time worked without a lost-time accident through March 29:

| | | |
|---------|----------|---------------------|
| Paducah | 171 Days | 1,085,000 Man-Hours |
| ORGDP | 28 Days | 412,000 Man-Hours |
| ORNL | 108 Days | 1,920,840 Man-Hours |
| Y-12 | 70 Days | 2,602,000 Man-Hours |

Safety is everyone's concern!

DIVISION Retirees



Everett Laxton



Reeder

Three Oak Ridge Gaseous Diffusion Plant retirees include veterans Clarence S. Everett, Tilmon Laxton and Albert D. Reeder.

Everett, a truck driver in Maintenance Division, retires to his Route 4, Old Midway Road, Lenoir City, home.

Laxton, a machinist in Fabrication and Maintenance Division, lives at 308 Ridgecrest Drive, Maryville. He came with Union Carbide in 1948.

Albert D. Reeder, a shift superintendent in Shift Operations and Security, came with Union Carbide in 1944. He retires to his 604 Michigan Avenue, Oak Ridge, home.



Burcham King



Thompson

Thirteen employees retired at Oak Ridge National Laboratory recently.

Homer L. Burcham, Virgil L. Coley, Lynn S. Curd and George J. Thompson retired from Plant and Equipment Division.

Burcham, who had worked for Union Carbide since 1954, plans to garden, travel and attend as many auto races as he can.

Coley, who lives at 7700 Gill Road, Powell, had worked at ORNL since September 10, 1948.

Curd, a welder, plans to do some construction jobs after retirement. He lives on Clinton Highway, Knoxville.

Thompson, an automotive mechanic, plans to do plenty of fishing, hunting and camping. He and his wife, Elsie, live at 605 D. Street, Lenoir City.

Walter D. King, whose hobby is repairing antique clocks, retired from the Instrumentation and Controls Division. King is originally from Knoxville and enjoys fishing in his spare time. He and Mildred, his wife, live on Westland Drive, Concord.

Jack Truitt and William H. Hinds retired from the Reactor Chemistry Division. Both men had worked for Carbide over 20 years.

Edward C. Hendren retired from the Analytical Chemistry Division. He lives at Route 3, Clinton.

Anna S. Hobbs, a secretary in Metals and Ceramics Division, had over 20 years of company service. She lives at 1712 Uppingham Drive, Knoxville.

Robert F. Irwin was a desk lieutenant in the Laboratory Protection Division. He resides at 5006 Cloverdale Lane, Knoxville.

Fay E. Puryear, who had over 25 years of company service, worked in the Information Division. Her home is at 218 Highland Avenue, Oak Ridge.

Lucille P. Raulston had worked for Carbide since November 6, 1943. She retired from the Chemistry Division.



Margaret and Robert R. White

The first couple retiring from Union Carbide's Nuclear Division together take with them more than 56 years company services. Robert R. White, in Y-12's Reproduction Department, and Margaret White, Accounts Payable in ORGDP, retire to their Route 5, Harriman, home. White joined Union Carbide in 1946, Mrs. White in 1944. They plan to travel. White collects and repairs old clocks.



Anders Beeler

A host of Y-12ers left on retirement during March. Four were normal retirements, the rest were early ones.

Retiring were:

Troy J. Anders, who lives at Route 6, Clinton, came with Union Carbide in 1951. He was in the Electrical and Electronics Department.

Clyde C. Beeler, 212 Oklahoma Avenue, Knoxville, was in the General Machine Shop. He joined Union Carbide in 1950.



Brown Brownfield

Herschell L. Brown, Buildings, Grounds and Maintenance Shops, lives at Route 1, Kingston. He came here in 1951.

Paul E. Brownfield, Buildings, Grounds and Maintenance Shops, came here in 1951. He lives at 226 North Purdue Avenue, Oak Ridge.



Mrs. Butcher Butcher

Ellery Butcher, Route 1, Kingston, joined Union Carbide in 1956. He was in Buildings, Grounds and Maintenance Shops.

Mrs. Mabel C. Butcher, who came here in 1951, is an early retiree. She lives at Route 1, Kingston, and was employed in Chemical Services.



Gillis McCoy

Lewis B. Gillis, Production Services, joined Union Carbide in 1950. He lives at Route 3, Kingston.

Tom McCoy, Research Services, lives at Route 6, Clinton. He came with Union Carbide in 1945.

SCOREKEEPERS NEEDED

Folks who like to bowl may be interested in keeping scores this weekend, April 7, 8 and next Saturday April 14. Just give Director Bill Hackett a call at 3-5921 and let him know when you can keep score.

Next Issue

The next issue will be dated April 19. The deadline is April 11.



Moody Neubert

Toy S. Moody, Process Maintenance, lives at 230 Illinois Avenue, Oak Ridge. He joined Union Carbide in 1944.

Albert F. Neubert, also in Research Services, joined Union Carbide in 1950. He lives at Route 28, Knoxville.



Mrs. Pitchford Underwood

Mrs. Martha P. Pitchford, in Building Services, joined Union Carbide in 1946. She lives at 108 Houston Lane, Oak Ridge.

Ralph F. Underwood, Route 2, Lansing, was in Assembly Operations. He came with Union Carbide in 1953.



Smith Selvidge

Lewis E. Selvidge lives at Route 3, Lenoir City. He was in Process Maintenance, and came here in 1944.

Carol B. Smith, Route 25, Fox Lomas Road, Knoxville, was in General Shops. He came here in 1954.



Van Dyke Wheeler

Albert T. Van Dyke, Materials Forming, joined Union Carbide in 1950. He lives at 114 Pratt Lane, Oak Ridge.

George S. Wheeler, Area Five Maintenance, lives at 9117 Joy Lane, Oak Ridge. He came here in 1950.

ANY AGE

Cancer doesn't respect birthdays, it can strike young and old. But, explains the American Cancer Society, folks over 40 should especially remember to have an annual checkup including cancer tests. One of the important tests is called a "procto" and it's used to detect a very common form of cancer, colon-rectal cancer.

Y-12 technology to be shown in SME's tool show, Detroit

New technologies available to industry, developed at four installations operated by Union Carbide Corporation for the U.S. Atomic Energy Commission, will be displayed at the Society of Manufacturing Engineers' Tool Show in Detroit, May 7-11.

The exhibit is sponsored by the Nuclear Division's Industrial Cooperation Program, which attempts to keep private industry abreast of technology developed at the Oak Ridge National Laboratory, Oak Ridge Y-12 Plant and the gaseous diffusion plants at Oak Ridge, Tenn. and Paducah, Ky. This program includes the issuance of Industrial Cooperation Bulletins describing new technologies to a mailing list of 800 industries, institutions, agencies and publications; providing engineering drawings to requestors; sponsoring information clinics; and the loan of specialized motion picture films.

Because the SME Tool Show is an exhibit of manufacturing tools and techniques, representing some 300 firms from 15 nations, the Union Carbide Nuclear Division display will feature

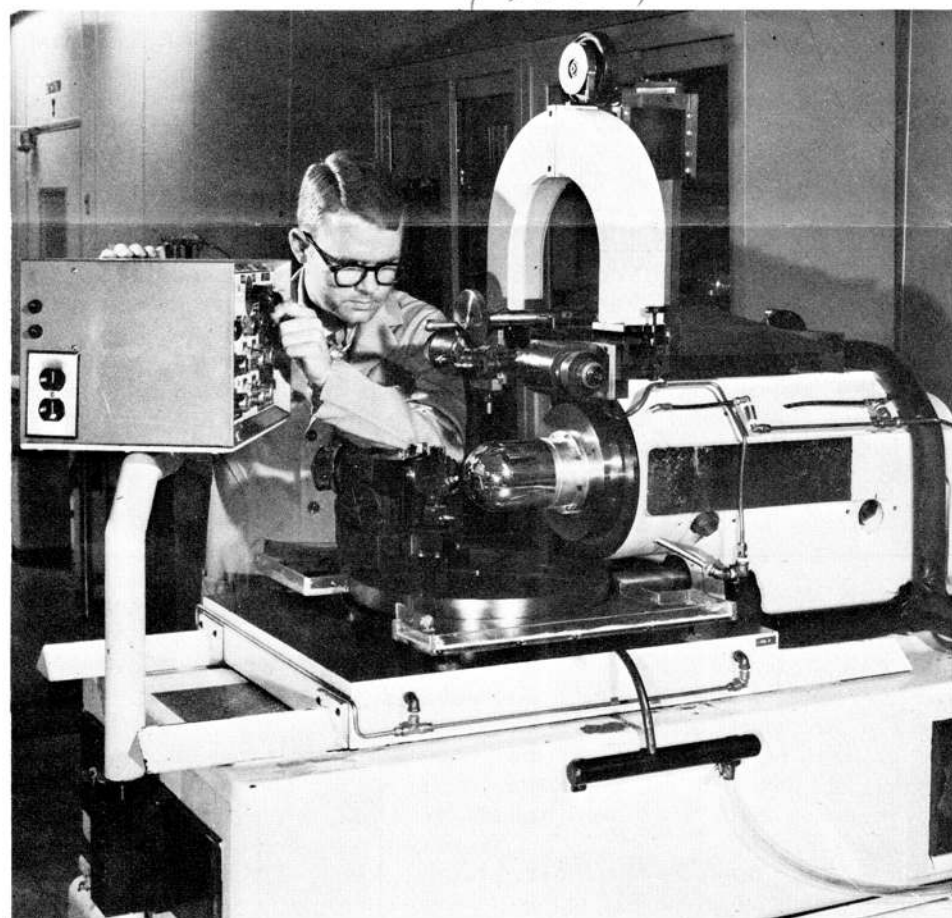
precision machining technology developed at the Oak Ridge Y-12 Plant.

The highlight of the exhibit will be an operating experimental radius-turning machine equipped with air-bearing spindle, rotary table, and diamond tool holding fixture. It is capable of machining to a precision of a few micro-inches.

Also included in the exhibit will be displays of a spherical-design air-bearing spindle, a small linear voltage differential transformer (LVDT) gage utilizing an air-bearing, a free-state part support system, a pneumatic-chip-breaker cutting tool, an optical method of surface finish measurement, several diamond-turned parts, and a high-speed motion picture film of diamond-knife machining.

The exhibit will be manned by several persons from the Nuclear Division installations.

An estimated 25,000-35,000 manufacturing engineers, executives and production personnel from throughout the world are expected to attend the tool show.



FEATURED IN DISPLAY — This experimental radius-turning machine, developed at Y-12, will be the feature display for the Nuclear Division, at the SME Tool Show in Detroit, May 7-11. The machine is equipped with air-bearing spindle, rotary table, precision measuring system and diamond tool holding fixtures. Hubert P. Prewett operates the machine.

ORGDP BOWLING

The All Stars are still way ahead over the City Slickers, by some 42 points. Paul Clabough and W. Redmond recently set the alleys ablaze, each rolling a 233 game scratch. The Double X and Atoms fall into third and fourth place in the Tuesday night league.

Mary Foley paced the ORGDP Women's Bowling League recently, rolling games of 207, series of 551, scratch, of course. The Pay-Offs pace the league, eight points ahead of the Up-Towners.

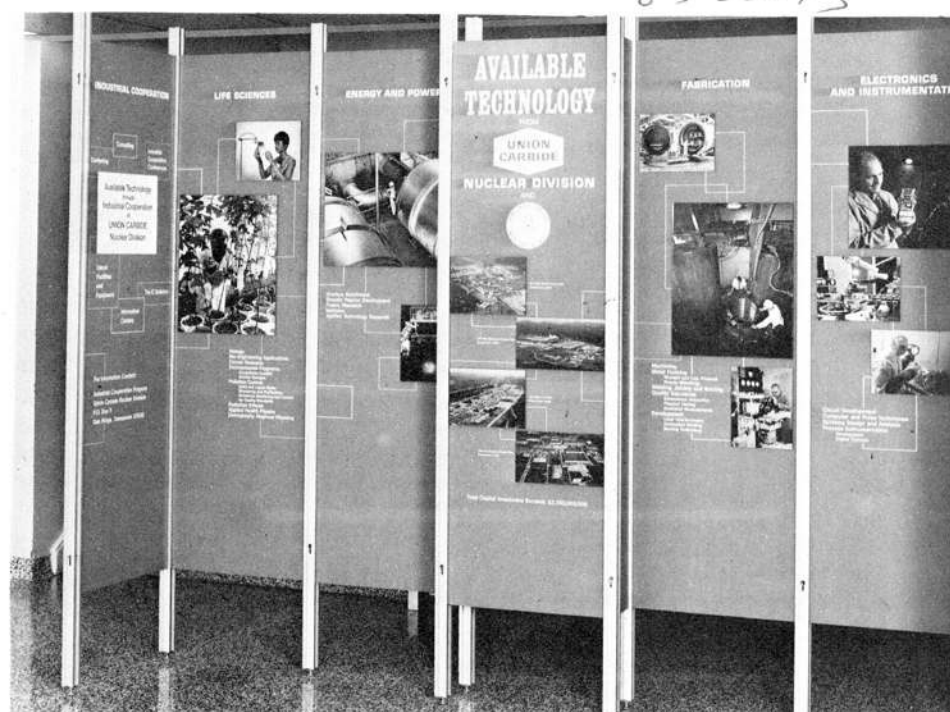
Earl Duff led individual scorers recently in the ORGDP Wednesday League,

rolling a 240 game. Clyde Bolen put a 660 series on the boards. The Mix-Ups are six and one-half points up front of the Amps.

PADUCAH PLANT DANCE

The Paducah Plant dance committee has announced Friday, May 25 as the date for the big Spring Dance. It will be held at the Paducah Civic Center. The committee urges Paducah employees to begin their plans now.

Got a refund on income tax? Savings bonds make a good investment for that extra cash.



AT TOOL SHOW — The Nuclear Division's Industrial Cooperation Program exhibit will be displayed at the Society of Manufacturing Engineers Tool Show in Detroit next month along with the operating radius-turning machine (seen in other photo) and other developments from Y-12.

Nuclear Division deaths

Clarence H. Robbins Jr., Computing Technology Center at the Oak Ridge Gaseous Diffusion Plant, died in the Oak Ridge Hospital March 18.

A native of Richlands, Va., Mr. Robbins served in the U.S. Army during World War II. The Robbins home is at 513 Crestwood, Clinton. He came with Union Carbide in 1957.

Survivors include his wife, Mrs. Betty Ann Robbins; a daughter, Vicki; two sons, Mark Howard and Richard Bennett Robbins; his mother, Mrs. Clarence H. Robbins Sr., Oak Hill, W. Va.; a sister and a brother.

Funeral services were held at the Memorial United Methodist Church in Clinton, with the Rev. Wayne Cummings officiating. Burial was in the Tennessee Valley Memory Gardens at Claxton.



Mr. Robbins

Edith M. Zarzecki, a secretary in the Analytical Chemistry Division at Oak Ridge National Laboratory, died March 9 in a Knoxville hospital.



Mrs. Zarzecki

Mrs. Zarzecki came to Oak Ridge from Colbert County, Ala., and had been employed at ORNL for over 28 years.

Survivors include her husband, Joseph J. Zarzecki, 106 Delmar Cr., Oak Ridge; two brothers, Richard E. Minor and James Minor; two nieces and a nephew.

Funeral services were held March 12 in the chapel of Martin's Funeral Home, with the Rev. George Schmidt officiating. Burial followed in Anderson Memorial Gardens.

Patents granted

To Donald D. Cannon, Francis C. Davis, John D. Sease and Francis J. Furman Jr., ORNL, for "Fabrication of Bonded-Particle Nuclear Fuel Sticks."

To Casimer J. Borkowski and James M. Rochelle, ORNL, for "Digital Radiation Dosimeter with Improved Integrating Pulse Ionization Chamber."

To Joseph P. Hammond, ORNL, for "Method for Diffusion Bonding Refractory Metals and Alloys."

To Kuang-Hui Lin, ORNL, for "Process for Decontamination of Neutron-Irradiated Beryllium."

To Benadetto A. Soldano, ORNL, for "Reactor Safety Spray Solution Base-Borate."

To Jerry Braunstein, ORNL, and Karl A. Romberger, Weatherly, Pa., for "Electrochemical Apparatus for Determination of Molten Salt Composition."



Mr. Crews

James C. Crews, Development Division at ORGDP, died at the Oak Ridge Hospital March 27.

A native of Monroe, Mich., Mr. Crews graduated from the University of Louisville, and held an M.S. from Louisiana State University. He came with Union Carbide in 1952.

The Crews home is at 108 Willow Lane, Oak Ridge. Survivors include his wife, Mrs. Edith Smith Crews, daughters, Eleanor, Catherine and Sally. A sister, Anne Crews;

and a brother, John Crews, also survive. Funeral services were held at St. Stephen's Episcopal Church, with the Rev. Manney Reid and the Rev. Joe Boulet officiating. Burial was in Vicksburg, Miss. The family has requested that any memorials be in the form of gifts to the James C. Crews Memorial. Checks may be made in care of the Oak Ridge Education Association. P.O. Box Q, Oak Ridge, 37830.



RECREATIONOTES

CARBIDE VOLLEYBALL

The Pack stands one game ahead of The Hawks, who are only three ahead of the Gang in close Volleyball competition.

Volleyball standings follow:

| Team | W | L |
|--------------------|----|----|
| The Pack | 30 | 0 |
| The Hawks | 38 | 1 |
| The Gang | 29 | 4 |
| Taxi Squad | 28 | 5 |
| The Committee | 25 | 8 |
| Y-12 Old Men | 23 | 10 |
| Electric Bananas | 22 | 11 |
| Anti-Quarks | 19 | 14 |
| Old Men | 17 | 13 |
| Jokers | 16 | 17 |
| Radphys | 13 | 17 |
| Over-the-Hill-Gang | 11 | 19 |
| Spikers | 12 | 21 |
| Raiders | 9 | 18 |
| Bawlers | 10 | 23 |
| Benthics | 10 | 23 |
| Quarks | 9 | 21 |
| Bombers | 7 | 20 |
| Sloths | 6 | 27 |
| Playmakers | 5 | 22 |
| Phoenix | 3 | 27 |

CARBIDE BASKETBALL

The Atomic League saw a dead-lock in final standings, which necessitated a play-off. The GBU's downed the CC 69ers in the final match 55 to 55, with Hoyt Eason proving to be the big gun, dropping 20 points through the hoop. Harold Conner scored a big 28 points for the 69ers.

Final standings follow:

| Team | W | L |
|---------------|----|----|
| GBU's | 15 | 1 |
| CC 69ers | 15 | 1 |
| Springers | 11 | 5 |
| Pistols | 8 | 5 |
| Alpha 5 Bucks | 7 | 9 |
| Bottlenecks | 7 | 9 |
| K-25 Trojans | 4 | 12 |
| Sharpshooters | 4 | 12 |
| Isomets | 1 | 15 |

The Nuclear League went to the Aardvarks, who took the season with a 15 won, one loss record. The closest team to that was the Bombers with a 13-3 record.

Final standings follow:

| Team | W | L |
|------------------------|----|----|
| Aardvarks | 15 | 1 |
| Bombers | 13 | 3 |
| TAT Playmakers | 10 | 6 |
| X-10 Cafeteria | 9 | 7 |
| Environmental Sciences | 8 | 8 |
| Grundy Express | 8 | 8 |
| Abends | 9 | 10 |
| Biology | 3 | 13 |
| Butterfingers | 1 | 15 |

SKEET TOURNAMENT

March's Skeeters saw Vernon Raaen, ORNL, stand in first place with a 49,748 score. ORNLer John Basler fired a 48,723 for second place and Y-12er Jim Rhew tallied a 48,720.

H.P. Prewitt and Perry Bullard were under penalty due to previous high firings.

OAK RIDGE GOLF

Tournaments for the three Union Carbide plants in Oak Ridge have been set by the Recreation Department.

They are as follows:

| | Y-12 | ORGDP | ORNL |
|-------------|-----------------|-----------------|-----------------|
| April 28 | Wallace Hills | Whittle Springs | Gatlinburg |
| May 19 | Gatlinburg | Wallace Hills | Whittle Springs |
| June 30 | Whittle Springs | Southwest Point | Cedar Hills |
| July 28 | Southwest Point | Cedar Hills | Wallace Hills |
| August 25 | Cedar Hills | ----- | Southwest Point |
| September 8 | ----- | Gatlinburg | ----- |

Entries must be in the Recreation office prior to the drawings on noon the Wednesday before the Saturday tournament. Greens fees, and other details, are available at the Recreation Office, Building 9711-5, extension 3-5833.

The entry blank for the first tournament appears below.

Tee-Off Time Application for April 28

(Check Appropriate Plant)

- ☐ Y-12--WALLACE HILLS GOLF COURSE
☐ ORGDP--WHITTLE SPRINGS GOLF COURSE
☐ ORNL--GATLINBURG GOLF COURSE

2 Carts

Check

LEADER

Phone

Bldg.

Time Preferred

COMPLETE AND RETURN TO YOUR RECREATION OFFICE

Entries must be received prior to drawing on April 25, 2 P.M.

ORGDP--Building K1001--C-Wing--Room 136

ORNL/Y-12--Building 9711-5

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Other than at Gatlinburg, golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times.



BOWLING GREATS — Don Branson and Bill Ladd, left to right, took top honors in the state-wide bowling tournament, completed recently in Nashville. Branson, with his partner, rolled high in doubles... Ladd took high all events scratch honors, making him the state champion!

Nuclear Division men, kin pick up bowling high marks

With the Nuclear Division's Oak Ridge bowlers in the heat of a big tournament, they turn up some honors among state and national woodsmen. On the hardwood in Nashville recently, Bill Ladd took top honors with an 1884 scratch all events score, making him the champion state bowler!

Ladd's scores of 573 in singles, 618 in doubles, and 693 in team event made him highest among the Volunteer State's keggers. There were more than 400 teams participating in the state-wide event. He bowled his doubles with fellow Y-12er Lynn Hart.

Also copping top honors at the State was Don Branson in doubles.

Branson, with his fellow Roane County bowling mate Pete Gray (manager of the Tri-Cities Lanes), rolled a total of 1311. Branson's scores were 199, 219 and 222, while Gray topped out at 200, 233 and 238.

Another Y-12er, Ray Smith, in Security, reports his twin brother Jay currently is standing in fifth place in the Hoinke Classic. Jay rolled games of 186, 225, 218, 223 and 234 in the five game race at Cincinnati, March 25. Together with his 16-pin handicap, he stands with an 1156 score thus far in the tournament. He has to wait until July, however, when the tournament ends, to find out his winnings.

Y-12 BOWLING

The Mixed League belongs to the Alley Cats, Rollers or Splinters, whichever team comes through in the next two weeks of play. The Cats stand one point out in front of the Rollers and the Splinters are two and one-half points away from top berth. The Rollers won the league's first half.

The C League favors the Mini Strikes, a full two points out in the lead, squeaking by ahead of the Sunflowers. The Rollmasters' J.C. Kendra's 255 is still high in singles. However, Walt Goodwin has posted a 253, and Travis Craig a 246, as has Harold Zang.

The Classic League is still in the hands of the Bumpers, four and one-half points ahead of the Eightballs. The Playboys' Joe Smyrl rolled a 649 series recently to pace the league.

ALL CARBIDE BOWLING

The SASA's are two and one-half point leaders in the All Carbide Family Mixed League, ahead of Team No. 8 and Team No. 2.

ENGINEERING PICNIC

The Engineering Division (from ORGDP and Y-12) is planning an annual picnic Saturday, June 2. Details will follow.

What's in a word? Consider the difference between wise guy and wise man. —Marshalltown, Iowa, Times-Republican



PADUCAHAN HONORED — James R. Petty, Paducah Plant, was honored recently by the Paducah Parks and Recreation Department. At the Industrial Basketball League's annual banquet Jack Whaley, P & R director, awarded Petty the honor for his sportsman-like conduct "on and off the floor." He was chosen for the trophy from the other 200 players in the league.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)



By T. A. Lincoln, M.D.

QUESTION: "Is there any test where you can find out that you are free of malaria germs, so you can donate blood?"

ANSWER: No, there is no sufficiently reliable test available. Individuals who have a history of malaria are not acceptable as blood donors for the rest of their life. The need for blood is not severe enough to take any unnecessary risks.

QUESTION: "My son is a diabetic and has had several insulin reactions during the night. I could not arouse him and had to call an ambulance to take him to the emergency room. Is there anything I could do myself so I wouldn't have to take him to the hospital?"

ANSWER: For some strange reason many diabetics taking insulin are unaware of glucagon. Apparently their physicians assume that severe insulin reactions will never occur. Glucagon is a hormone which causes the blood sugar to rise within 5 to 20 minutes after given by injection. It is a safe drug and there is no danger of overdosage. The patient will usually regain consciousness and then can drink some orange juice or sugar water. Glucagon is available at all pharmacies in a small plastic box containing two small vials. Using the patient's insulin syringe, the diluting solution is withdrawn from one vial and injected into the second vial containing the powdered glucagon. It is mixed quickly, withdrawn, and injected subcutaneously just like insulin.

Every insulin-taking diabetic should have one of these kits. His family should have read the simple instructions and know where the kit is stored and be prepared to use it. Severe nocturnal insulin reactions must be avoided, if possible, but no diabetic's control is perfect. For those worried about cost, glucagon has a relatively long shelf life (4 years) and is not expensive (about \$3.00).

generalize on convalescence after surgery. A lot depends on the particular operation and whether there were any complications. Probably more people are over-cautious than under-cautious. Complete wound healing takes several months but initial wound strength is NOT dependent on healing. Dr. Irving L. Lichtenstein of Los Angeles has demonstrated this in animal experiments and has conducted clinical research. He performs a one-day inguinal hernia repair under local anesthesia. By a special technique he makes a reinforced repair. Patients are walking soon after. The repair is solid from the start and wound healing progresses while the patient rapidly returns to normal activities. The postoperative discomfort is apparently no worse than after an orthodox repair and soreness disappears sooner with activity. His recurrence rate is lower than for most orthodox hernia repairs.

Gradually increasing activity after returning home after an operation is desirable. In the absence of specific instructions, activities which do not cause excessive pain or fatigue are desirable. The total time required to return to good health as well as the risk of complications is reduced by sensible activity. Staying in bed unnecessarily or lying around feeling sorry for yourself will prolong your recovery.

QUESTION: "I'm going to have a vasectomy. I am reluctant to give up my fertility for all time. What's the story on freezing sperm?"

ANSWER: It's possible, but expensive. Stored in liquid nitrogen at -196.5°C sperm remain effective when thawed and can be used for artificial insemination. After thawing they are less motile, but if you had a high sperm count and had previously easily impregnated your wife, your frozen sperm probably would work at least for awhile. The conception rate within one year is good but, unfortunately, it appears to decline fairly rapidly thereafter. Work being done now on semen expanders and new freezing and thawing techniques should improve things. Incidentally, there are more boys conceived than girls by artificial insemination done with either fresh or frozen semen. A couple wanting only two children and who have had a girl already can increase their chances of a son appreciably by artificial insemination. At the present state of the art, however, freezing of semen for long-term storage appears to be a mighty poor investment.

LATEST METHODS

Mammography, thermography, xeroradiography, these long words spell fast methods for detecting breast cancer in its earliest stages when it is most curable. The American Cancer Society wants every woman to know about them.

Y-12 technology subject of talks



Moyer



Gray



Williams

Technology relating to ultrasonic testing, high-speed motion pictures, and ion plating was discussed by Y-12 personnel at national meetings during March.

The information contained in these reports was developed at Y-12 in support of various Atomic Energy Commission programs.

"Expanding the Capability of a Laboratory Ultrasonic Testing Facility," by Maynard W. Moyer and Donald H. Gray, was presented at the American Society for Nondestructive Testing Spring Conference in Los Angeles, March 12-16.

Roy L. Williams discussed "High-Speed Motion Pictures for Metal Cutting Analysis" at the 1973 WESTEC Engineering Conference in Los Angeles, March 12-16.

A report written by Richard T. Bell and James C. Thompson, entitled "Applications of Ion Plating in Metals Fabrication," was given at the Society of Vacuum Coaters Meeting in Chicago, March 28-29.



Bell



Thompson

COMPANY SERVICE —20-25-30—

ORNL 25 YEARS

Raymond L. Burnett, William L. Dunaway, Lowell M. Foust, Robert J. Gray, Charles A. Mossman and Ralph O. Payne.

20 YEARS

Boone H. Anderson, Selden R. Bernard, Virgil R. Bullington, Alvin P. Callahan, Richard A. Crowell, Ralph H. Guymon, Charles H. Helton, Walter L. Hyatt, Jerry Lambdin, James L. Lovvorn, Stanley A. MacIntyre, Carl R. Mason, Bobby G. Pierce, Roger B. Quincy Jr., Theodore F. Sliski and William Zacchi.

PADUCAH 20 YEARS

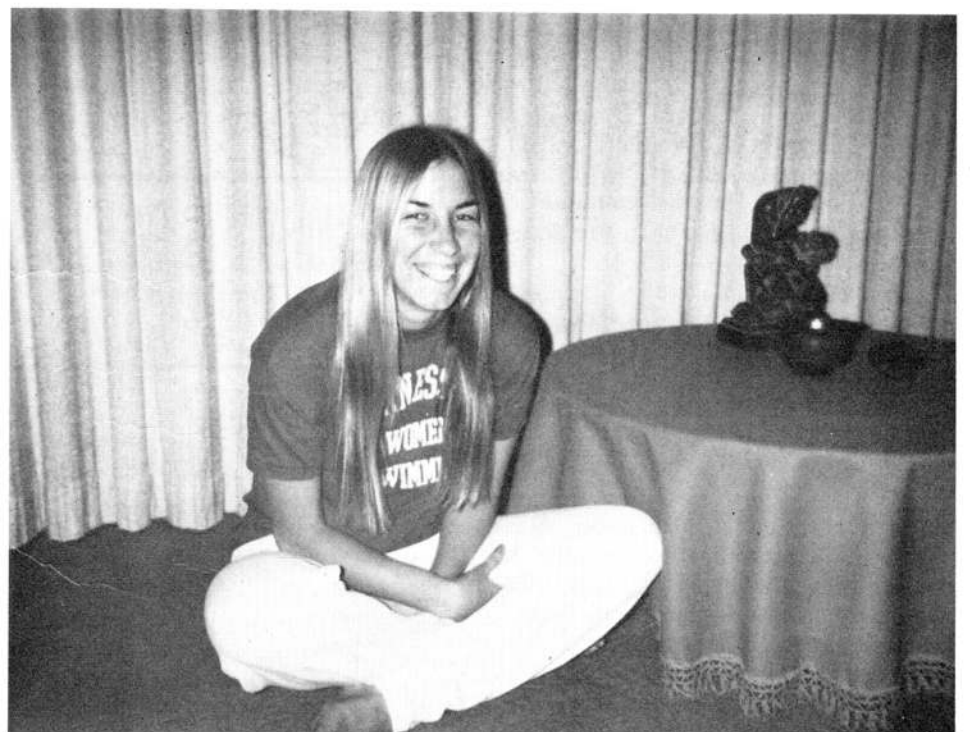
John C. Bruce, Roby C. Kight Jr., Joe G. Moseley Jr., Russell I. Giltner, William H. Meriwether, John R. Shuppert, Lloyd H. Sheehan and Cecil H. Tilford.

Y-12 PLANT 25 YEARS

Ben L. Hammer.

20 YEARS

Cecil S. Davidson, Connie F. Jenkins, Maggie K. Martin, John C. Holt, Roy H. Gilbert, Harry B. Pruden Jr., Earl C. Farris, Lenley A. Brown and Howard G. Watkins.



TWO FIRSTS — Kristy Rom, the first woman to pass the mandatory Lifeguard School Training course, has been hired as the first woman lifeguard to work at The University of Tennessee Student Aquatic Center. Miss Rom, a sophomore, is a member of The University of Tennessee Women's Swim Team and has worked as a lifeguard at the Oak Ridge Swimming Pool for four years. She is the daughter of Mr. and Mrs. Albert M. Rom, Oak Ridge. Rom works in the Chemical Technology Division at ORNL.

CALENDAR of EVENTS

TECHNICAL

April 5

Biomedical Graduate School Seminar: "Structural-Function Relationships of E. coli Phosphoenolpyruvate Carboxylase," Thomas E. Smith, Lawrence Radiation Laboratory. Large Conference Room, Building 9207, Y-12, 12:15 p.m.

Biomedical Graduate School Seminar in Aging: "Mutation Frequencies and Redundancy of Ribosomal RNA Genes in Mammalian Species of Different Aging Rates." Richard Cutler, University of Texas, Dallas. Large Conference Room, Building 9207, 3 p.m.

April 6

Mathematics Division Seminar: "General Principles of Multivariate Analysis of Categorical Data," Gary G. Koch, University of North Carolina. Conference Room, Building 9704-1, Y-12 Plant, 9:30 a.m.

Metals and Ceramics Division Seminar: "Steam Corrosion of Nickel - and Iron-Base Alloys for Nuclear Superheat," Siegfried A. Leistikow, Karlsruhe Nuclear Research Center, Germany. East Auditorium, Building 4500N, 10 a.m.

Solid-State Biophysics Seminar: "Interpretation of Dielectric Functions." M.W. Williams. Room S-126, Building 4500S, 11 a.m.

Physics Division Seminar: "Aspects of the Giant Dipole Resonance," A. M. Lane, Atomic Energy Research Establishment, Harwell, England. East Auditorium, Building 4500N, 3 p.m.

April 9-10

Biomedical Directors Meeting: Oak Ridge National Laboratory.

April 9-12

Symposium on Molecular Cytogenetics: Riverside Motor Lodge, Gatlinburg.

April 11

Chemical Technology Division Seminar: "Dissolution of Unirradiated PuO₂ and UO₂-PuO₂," D.E. Horner. Central Auditorium, Building 4500N, 3 p.m.

April 11-13

Solid State Division Information Meeting: Oak Ridge National Laboratory.

April 13

ORNL-NSF Environmental Program Seminar: "Economics and the Economy of Resources," Professor Nicholas Gerogescu-Roegen, Vanderbilt University. Central Auditorium, Building 4500N, 2 p.m.

April 16

Biomedical Graduate School Seminar: "Cilia Development," Ray Stephens, Brandeis University. Large Conference Room, Building 9207, 3:30 p.m.

April 18

Solid State Division Seminar: "The Nature of Self-Interstitials - A Key Problem in the Understanding of Radiation Damage in Both fcc Metals and Elemental Semiconductors," Dr. Werner Frank, Max-Planck-Institut für Metallforschung, Stuttgart. Conference Room, Building 3025, 10 a.m.

Chemical Technology Division Seminar: "Applications of Nuclear Heat to Industry," C.C. Haws; and O.L. Culbertson, University of Tennessee. Central Auditorium, Building 4500N, 3 p.m.

COMMUNITY

April 5-18

Oak Ridge Community Art Center: Exhibition of Charlotte Berend-Corinth, oils and watercolors.

COMPANY SERVICE —20-25-30—

ORGDP

30 YEARS

Perry J. Pryor, assistant manager of the General Accounting Division of the Nuclear Division, celebrated his 30th anniversary with Union Carbide April 5.

A native of Louisville, Pryor attended the University of Louisville. He joined Union Carbide there in 1943, transferring to Oak Ridge in 1954. He and his wife, Helen, live at 109 Westwind Drive, Oak Ridge.

25 YEARS

Raymond V. Thatcher.

20 YEARS

Jessie H. Rayburn and Byron H. Hinton.

Five-year safety competition ends

Five years of competition for permanent possession of an annual safety plaque ended recently in the Maintenance and Plant Services section of ORNL's Plant and Equipment Division.

The plaque has been awarded to the Electrical, Air-Conditioning and Heating Services department, which suffered no serious injuries during the calendar years 1969, 1970 and 1972. The department is composed of two groups which will share the plaque.

The other departments which competed for the plaque are Building and Utilities Services department and Field, Transportation and Support Services department.

ORNL BOWLING

The Misfits hold the top spot down in the A League, as ORAU's Paul Davis holds the top game, in singles, of the night... a 221. The Pockets hold second place, a mere half point ahead of the Punups.

The Damagers are king-pins in the C League, a goodly pace ahead of the Pin Heads. The Remkeys' C.B. Gaither rolled a 638 game, scratch, recently.

The Woodchoppers are three-point leaders in the E League, ahead of the Mets and Limits, tied in second place.

The Mousechasers have a half-point lead in the ORNL Ladies League bowling slightly better than the Pick-Ups and Bowling Aces. Sandra Biedel holds the high scratch series thus far, a 689.

CARBIDE ARCHERY

Paul Lickliter scored a 269 to lead Archers in the eighth firing in the Indoor Archery League. He was followed by Dwayne Fry with a 241, and Cecil King with a 231.

There are no seven wonders of the world in the eyes of a child. There are seven million. —Walt Streighttiff



ORNL

JOIN car pool from Inskip - Norwood area, Knoxville, to any portal (including Melton Valley), 8 a.m. shift. Cecil L. Shepherd, plant phone 3-1872, home phone Knoxville 689-5674.

JOIN car pool from Inskip - Norwood area, Knoxville, to East Portal, 8:15 shift. W.H. Cook, plant phone 3-1670, home phone Knoxville 689-5723.

JOIN car pool from vicinity of Suburban Shopping Area, West Hills and Crestwood Hills Subdivision, Knoxville, to West or South Portal, 8 a.m. shift. E. Leon Fair, plant phone 3-6775, home phone Knoxville 693-3211.

TWO CAR POOL MEMBERS from vicinity of Waddell, West Outer or Pennsylvania to East or North Portal, 8:15 a.m. Tom Burnett, plant phone 3-6929, or Oak Ridge 483-1975; or Dick Reed, plant phone 3-1801 or Oak Ridge 383-3458.

Y-12 PLANT

RIDE or will join car pool from Clinton to Bear Creek or Pine Ridge Portal, straight day. J.J. McNabb, plant phone 3-7312, home phone Clinton 457-1392.

ORGDP

RIDE from Solway Road to Portal 2, 7:45 a.m. to 4:15 p.m., H.R. Tinch, plant phone 3-9313, home phone Oak Ridge 483-4907.

RIDE or will join car pool from Powell to Portal 2, 7:45 a.m. to 4:15 p.m. Larry Merryman, plant phone 3-3702, home phone Knoxville 94-8381.

RIDE from 107 West Pawley Road, Oak Ridge, to Portal 4, 7:45 a.m. to 4:15 p.m. R.M. Walton, plant phone 3-3206, home phone Oak Ridge 482-1591.

QUESTION BOX

(Continued from page 1)

"Q" access authorization is required prior to access to information classified Secret Restricted Data. an "L" access authorization is required if the level of information is no higher than Confidential Restricted Data.

Job classification alone is not used as a criteria in determining persons who require an access authorization.

A background investigation is required prior to granting a "Q" access authorization. This investigation is performed either by the FBI or the Civil Service Commission depending on the sensitivity of the classified information involved. A background investigation is not normally conducted when an "L" access authorization is required. Granting "L" access is based upon a National Agency Check.

Background investigations are conducted in sufficient depth to determine the applicant's loyalty, character, and associates. Obviously, each investigation is different and some require greater scope than others.

Information regarding the ratio of persons granted access authorization to those rejected is not available.

| | | |
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